Work Task C5:

Effects of Abiotic Factors on Insect Populations in Riparian Restoration Sites

Contact: Bill Wiesenborn, LC-8226

Purpose: Investigate micro-habitat factors influencing the

availability of insect prey base for LCR MSCP covered species, especially riparian obligate bird species, including southwestern willow flycatcher, yellow-billed cuckoo, Gila woodpecker, vermillion

flycatcher, Bell's vireo, yellow warbler, and

summer tanager.

Conservation

Measures: MRM1 and MRM2

Long-term Goal(s): Information obtained from this study will be used to

help plan riparian habitat restoration for covered species and may be used to evaluate habitat quality.

FY2006 Estimate: \$90,000 includes Reclamation staff and travel.

FY2007 Estimate: \$86,000. This two-year study will be completed in

FY2007.

FY2008 Estimate: 0

Project Description: Insects are the prey base for many LCR MSCP

covered species, including birds and bats. Insect populations vary depending on micro-habitat and abiotic conditions within riparian stands. This study will help determine the relationship between abiotic factors, such as soil moisture and composition, and insect species composition and abundance needed to provide the prey base necessary for covered species

habitat creation.

Specific FY2006 Work Tasks:

- a) Coordinate with wildlife agencies and other interested parties to review the scope of the research on insects and other arthropods. This will be accomplished via conference calls.
- b) Collect soil and groundwater samples from sites along the LCR.
- c) Collect insect samples from these sites.
- d) Conduct lab analysis of soil and groundwater samples.